

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter I of the Patent Cooperation Treaty)

(PCT Rule 44bis)

Applicant's or agent's file reference <b>PCT8299-8343</b>	FOR FURTHER ACTION	See item 4 below
International application No. <b>PCT/JP2005/020687</b>	International filing date ( <i>day/month/year</i> ) <b>04 November 2005 (04.11.2005)</b>	Priority date ( <i>day/month/year</i> ) <b>05 November 2004 (05.11.2004)</b>
International Patent Classification (8th edition unless older edition indicated) See relevant information in Form PCT/ISA/237		
Applicant <b>SEMICONDUCTOR ENERGY LABORATORY CO., LTD.</b>		

1. This international preliminary report on patentability (Chapter I) is issued by the International Bureau on behalf of the International Searching Authority under Rule 44 bis.1(a).

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

In the attached sheets, any reference to the written opinion of the International Searching Authority should be read as a reference to the international preliminary report on patentability (Chapter I) instead.

3. This report contains indications relating to the following items:

- |                                     |                     |   |
|-------------------------------------|---------------------|---|
| <input checked="" type="checkbox"/> | <b>Box No. I</b>    | Basis of the report   |
| <input type="checkbox"/>            | <b>Box No. II</b>   | Priority  |
| <input type="checkbox"/>            | <b>Box No. III</b>  | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  |
| <input type="checkbox"/>            | <b>Box No. IV</b>   | Lack of unity of invention  |
| <input checked="" type="checkbox"/> | <b>Box No. V</b>    | Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input checked="" type="checkbox"/> | <b>Box No. VI</b>   | Certain documents cited   |
| <input type="checkbox"/>            | <b>Box No. VII</b>  | Certain defects in the international application  |
| <input type="checkbox"/>            | <b>Box No. VIII</b> | Certain observations on the international application   |

4. The International Bureau will communicate this report to designated Offices in accordance with Rules 44bis.3(c) and 93bis.1 but not, except where the applicant makes an express request under Article 23(2), before the expiration of 30 months from the priority date (Rule 44bis .2).

Date of issuance of this report <b>08 May 2007 (08.05.2007)</b>	
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. +41 22 338 82 70	Authorized officer  <b>Masashi Honda</b> e-mail: pt08.pct@wipo.int

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

RECD	23 FEB 2006
WIPO	PCT

To:  
SEMICONDUCTOR ENERGY LABORATORY  
CO., LTD.

398, Hase, Atsugi -shi, Kanagawa  
2430036 Japan

**PCT**

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY  
(PCT Rule 43bis.1)

		Date of mailing (day/month/year)      21.02.2006
Applicant's or agent's file reference <b>PCT8299-8343</b>		<b>FOR FURTHER ACTION</b> See paragraph 2 below
International application No. <b>PCT/JP2005/020687</b>	International filing date (day/month/year) <b>04.11.2005</b>	Priority date (day/month/year) <b>05.11.2004</b>
International Patent Classification (IPC) or both national classification and IPC <b>Int.Cl. H01L51/50 (2006.01), G09F9/30 (2006.01), H01L27/32 (2006.01)</b>		
Applicant <b>SEMICONDUCTOR ENERGY LABORATORY CO., LTD.</b>		

1. This opinion contains indications relating to the following items:

- Box No. I Basis of the opinion
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Date of completion of this opinion <b>02.02.2006</b>	
Name and mailing address of the ISA/JP <b>Japan Patent Office</b> 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Authorized officer <b>Tsutomu Kosugo</b> Telephone No. +81-3-3581-1101 Ext. 3271
2V 9313	

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/JP2005/020687

Box No. I Basis of the opinion

1. With regard to the language, this opinion has been established on the basis of:  
 the international application in the language in which it was filed  
 a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material  
 a sequence listing  
 table(s) related to the sequence listing
  - b. format of material  
 on paper  
 in electronic form
  - c. time of filing/furnishing  
 contained in the international application as filed  
 filed together with the international application in electronic form  
 furnished subsequently to this Authority for the purposes of search
3.  In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/020687

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-12	YES
	Claims		NO
Inventive step (IS)	Claims	1-12	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-12	YES
	Claims		NO

2. Citations and explanations:

D-1 JP 2003-272860 A (KIDO JUNJI et al) 2003.09.26 claims paragraph 60, 61  
D-2 JP 2000-309566 A (IDEMITSU KOSAN CO) 2000.11.07, Claims, paragraph 147  
D-3 WO 04/094389 A (SEMICONDUCTOR ENERGY LAB) 2004.11.04, Claims

The subject matter of claims 1-12 are neither disclosed in any of the documents cited in the ISR nor obvious to a person skilled in the art.

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

International application No.  
PCT/JP2005/020687

Box No. VI Certain documents cited

1. Certain published documents (Rules 43 bis.1 and 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
JP 2006-24791 A [E, X]	26.01.2006	08.07.2004	08.07.2004
JP 2005-166637 A [E, X]	23.06.2005	06.10.2004	10.11.2003

2. Non-written disclosures (Rules 43 bis.1 and 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)